

CLAIMS

8.4
a. 1. A CD player, comprising:
a CD drive, which receives a CD and reads compressed digital audio data recorded thereon; and
an integrated circuit chip, which decompresses the compressed data and produces a non-compressed audio output.

2. A CD player according to claim 1, wherein the data are compressed by MPEG compression.

3. A CD player according to claim 2, wherein the data are compressed by MPEG Layer-3 compression.

2.4. A CD player according to claim 1, wherein the data are compressed at least 4-fold.

3.4. A CD player according to claim 2.4, wherein the data are compressed at least 8-fold.

4.4. A CD player according to claim 3.4, wherein the data are compressed approximately 12-fold.

5.4. A CD player according to claim 1, wherein the chip includes firmware for decompressing the data.

6.4. A CD player according to claim 1, wherein the chip comprises a custom integrated circuit chip.

7.4. A CD player according to claim 1, wherein the chip does not comprise a general purpose processor.

8.4. A CD player according to claim 1, wherein the CD player comprises a mobile personal audio player.

9.4. A CD player according to claim 8.4, wherein the CD player is installed in a vehicle.

8.4
a. 12. A CD recording system, comprising:
a read drive, which receives and reads a first CD having audio data recorded thereon;
compression circuitry, which receives and compresses the audio data from the read drive; and

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a write drive, which receives the compressed data and records the compressed data on a second, recordable CD.

13. A system according to claim 12, wherein the circuitry compresses the data by MPEG compression.

14. A system according to claim 13, wherein the circuitry compresses the data by MPEG Layer-3 compression.

¹¹15. A CD system according to claim ¹⁰~~12~~, wherein the circuitry includes firmware for compressing the data.

¹²16. A CD system according to claim ¹⁰~~12~~, wherein the circuitry compresses the data at least 4-fold.

¹³17. A CD system according to claim ¹²~~16~~, wherein the circuitry compresses the data at least 8-fold.

¹⁴18. A CD system according to claim ¹³~~17~~, wherein the circuitry compresses the data approximately 12-fold.

^{2d}19. A method for playing a long-playing audio CD, comprising:

reading compressed digital audio data from the CD;
and

decompressing the data using a custom integrated circuit chip; and

converting the decompressed data to analog form.

¹⁶20. A method according to claim ¹⁵~~19~~, wherein decompressing the data comprises decompressing by MPEG decoding.

¹⁷21. A method according to claim ¹⁶~~20~~ wherein decompressing the data comprises decompressing by MPEG Layer-3 decoding.

¹⁸22. A method according to claim ¹⁵~~19~~, wherein decompressing the data comprises decompressing by at least 4-fold.

¹⁹~~23~~. A method according to claim ¹⁸~~22~~, wherein decompressing the data comprises decompressing by at least 8-fold.

²⁰~~24~~. A method according to claim ¹⁹~~23~~, wherein decompressing the data comprises decompressing by approximately 12-fold.

²¹~~25~~. A method according to claim ¹⁵~~19~~, wherein reading the compressed data comprises playing the CD in a mobile personal audio player.

²²~~26~~. A method according to claim ¹⁵~~19~~, wherein reading the compressed data comprises playing the CD in a CD player installed in a vehicle.

²³~~27~~. A method for producing a long-playing audio CD, comprising:

reading digital audio data from a prerecorded CD;
compressing the data using MPEG compression; and
recording the compressed data on the long-playing CD.

²⁴~~28~~. A method according to claim ²³~~27~~, wherein compressing the data comprises compressing by MPEG Layer-3 compression.

²⁵~~29~~. A method according to claim ²³~~27~~, wherein compressing the data comprises compressing by at least 4-fold.

²⁶~~30~~. A method according to claim ²⁴~~28~~, wherein compressing the data comprises compressing by at least 8-fold.

²⁷~~31~~. A method according to claim ²⁵~~29~~, wherein compressing the data comprises compressing by approximately 12-fold.

²⁸~~32~~. A method according to claim ²³~~27~~, wherein reading the data comprises reading data from a plurality of prerecorded CDs.

²⁹~~33~~. A method according to claim ²⁷~~31~~, wherein reading the data comprises inserting each of the plurality of CDs in

sequence into a read drive, in order to read data therefrom.

²⁹~~34~~. A method according to claim ²³~~21~~, wherein recording the data comprises recording data on the long-playing CD in an order that is different from the order of the data on the prerecorded CD.

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